



THE ROYAL COMMISSION ON VIOLENCE IN
THE COMMUNICATIONS INDUSTRY

RESEARCH REPORT

TELEVISION AND PROSOCIAL
BEHAVIOR

J. Philippe Rushton
Department of Psychology
University of Toronto

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J. Philippe Rushton
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IN THE COMMUNICATIONS INDUSTRY

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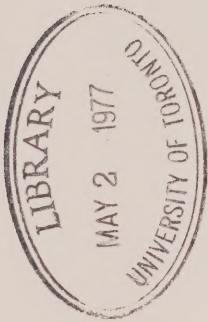
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* * *

151 Bloor Street West, Room 810,
Toronto, Ontario M5S 2V5

Telephone (416) 965 4593



TELEVISION AND PROSOCIAL
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A Report to the
PROVINCE OF ONTARIO
ROYAL COMMISSION ON VIOLENCE
IN THE
COMMUNICATIONS INDUSTRY

J. Philippe Rushton
Department of Psychology
University of Toronto
TORONTO, ONTARIO



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TELEVISION AND PROSOCIAL BEHAVIOR

TABLE of CONTENTS

<u>Chapter</u>	<u>Page</u>
1. The Importance of Observational Learning in Human Development.....	1
2. The Importance of Observational Learning from Television.....	7
3. Television's Effect on Altruistic Behavior.....	12
4. Television's Effect on Friendliness.....	22
5. Television's Effect on Behavior Involving Self-Control.....	29
6. Television's Effect on Diminishing Inappropriate Fears.....	34
7. Television's Effect in Creating Knowledge.....	38
8. Conclusions and Recommendations.....	45
9. Footnotes.....	50
10. References.....	58

1. THE IMPORTANCE OF OBSERVATIONAL LEARNING IN HUMAN DEVELOPMENT

People learn by watching others. Indeed, this is one of the most fundamental ways by which people learn new behavior. By watching others, for example, people who enter new occupations learn skills and attitudes necessary to their new job. Also by watching others, people can learn the complex skills involved in new sports and leisure time activities. Such learning often involves a great deal of effort and concentration. Other such learning however, takes place quite automatically. Think of speech as an example. The majority of the words we use are learned without any conscious effort. Simply by observing others, people acquire the vocabulary and many of the rules of grammar that they use. People also acquire their accents and styles of delivery by observing others. Thus whether people use a wide or a more limited range of expressive gestures when they talk will depend to a large extent on the particular models they watched when they were learning the language. A lot of this learning took place without their even being aware of it.

Children are particularly likely to learn by watching others. They are at the most formative period in their lives where they are striving to gain some understanding and mastery of the social world that they inhabit. by watching others and then imitating what they have seen they can learn the "rules" of social behavior. While adults have very often learned to distinguish between who is appropriate and who is inappropriate to watch and learn from, young children very often have not.

A great deal of research has been carried out on the importance of observational learning. A large amount of this research has been concerned

with children's social behavior. Consider the following study.

Children were taken to a playroom and told that they would be able to play with some of the toys there. Some of the children saw that there was already somebody playing in the room. These children had to wait until the other person, an adult, had finished playing before they could have their turn. The children watched while the adult played. The children saw the adult play in a very aggressive way. They watched as he hit a large rubber Bobo doll on the head with a hammer, punched it in the face, kicked it about the room, and threw things at it, at the same time saying "Pow, right in the nose" or "Bang" every time the doll was hit. Finally the children got their turn to play with the toys. As many parents will perhaps not be surprised to hear, the children were readily influenced by what they had seen. In the situation described above, if the children had seen an adult play aggressively then they too were more likely to beat up and kick the Bobo doll. The children who had not seen an adult play aggressively, showed very little inclination to beat up and kick the same Bobo doll. It was clear that most of the aggression shown by the children in this situation had been learned simply by watching what the adult had done. Many experiments such as the one described above have now been carried out. Several of the "classic" studies in this area were carried out by Dr. Albert Bandura¹ and his colleagues at Stanford University. There is little doubt that children can learn aggression by watching others behave aggressively.

It is not only "anti-social" behavior like aggression that children learn by watching others. They can also learn a whole range of other, more positive "pro-social" attitudes and behaviors like obedience, self-control, charity, courage, and co-operation. Consider the following

experiment. As in the studies on aggression, children were taken to a playroom and told they would be able to play with the toys there, one of which was a bowling game. The children were told that by playing on this bowling game they would be able to win tokens which they could exchange for a prize on the basis of the more tokens won, the better the prize would be. Before being able to play however, the children had to watch an adult take his or her turn on the game. The children watched while the adult won tokens and then, in one situation gave away some of his or her tokens to a needy child. The children then had their turn at the game, during which time they were left entirely alone in the room (but watched through a one-way mirror). The question was, would the children donate some of their tokens to the needy child too? The answer was a very clear yes. Dr. Joan Grusec at the University of Toronto has carried out several studies like the one described above. She has found repeatedly, that the amount of sharing children do is strongly influenced by what they see others do.^{2,3,4} Furthermore, what the children learn, they also remember. In one study the children were retested again after a delay of four months. Even after that length of time, children were more generous if they had previously seen an adult behave generously in that situation.⁵ Dr. Grusec's findings have been replicated by several other investigators, including myself. Working with a sample of British children, I found that children's sharing was influenced in either a generous or a selfish direction, depending on how they had seen an adult behave.⁶ Furthermore, like the children studied by Dr. Grusec in Toronto, these behaviors persisted over a long period of time. I have recently reviewed elsewhere many similar studies on the development of children's altruistic behavior.⁷ It is quite certain that children can and do learn to share simply by observing others.

In still other research carried out by Dr. Grusec on the social development of children, it has been shown that children can also learn self-control and to resist temptation as a result of watching how others behave. In these studies children are typically told not to play with certain attractive and tempting toys that are in a room. Then they are left alone in the room and their behavior is watched through a one-way mirror. What Dr. Grusec⁸ was able to show was that if the children had previously seen others resisting the temptation to touch the attractive toys then they too were better able to resist that same temptation. If, on the other hand, children had previously seen others giving in to the temptation, then they were less able to resist. Children who had not seen a model at all fell at a mid-way point in resisting the temptation. Thus, it was quite clear that the children's ability to resist the temptation had been increased or decreased, depending on what the children had seen others doing.

We should not make the mistake of thinking that it is only children whose social behavior is influenced by watching others. Adults are too. In an experiment carried out at the University of Oxford, I investigated whether adults could be influenced to behave in an altruistic manner as a result of watching someone else do so.⁹ In that study, the subject of the experiment accompanied a model

along a particular corridor in the Psychology Department. They came across a person wearing a large "Give Blood" badge, who was sitting at a table surrounded by "Give Blood" posters, information pamphlets, and donation forms. Both the subject and the model were approached by this person and given a brief talk on the importance of giving blood. They were then asked if they would volunteer to

donate a pint of blood. If the model was asked first and said yes, then fully 67% of the people accompanying the model also said yes when they were asked. If it was the subject that was asked first however, then only 25% volunteered. In a follow up of these people, appointment cards were mailed out inviting them along to the Regional Blood Transfusion Centre to actually give their blood. On average, six weeks later, 33% of the people who had seen another person volunteering to give blood, actually donated a pint of blood. None of the people in the other group gave. This study clearly demonstrated that altruism in adults can be reliably increased if those adults see others behaving altruistically.

All of the examples that have been discussed so far have been concerned with concrete social behavior. However, it is not just specific social behaviors that are learned, parrot like, by watching others. Rather, it is that people construct principles and "rules" from the behavior that they see others engage in. Many, many studies have now conclusively demonstrated that such abstract abilities as problem solving, creative thinking, knowledge of language rules, moral reasoning, and organization in memory can all be effectively learned simply by observing others.¹⁰

People do not, of course, model themselves after everybody they see. Characteristics of the model are important. Generally, successful people will be learned from rather than unsuccessful, powerful ones rather than non-powerful, similar rather than dissimilar, and nurturant rather than non-nurturant. It depends upon a complex interaction between the type of behavior being modeled, the situation it is being modeled in, and the type of person the watcher "identifies" with. Generally, as mentioned, models who are seen as successful or as possessing prestige (as seen by

the particular individual) are most likely to have influence. One study found, for example, that when a pedestrian had relatively high prestige (by being well dressed in a suit and tie) he was imitated more in crossing the road against a red light, than when he had relatively low prestige (by being poorly dressed in old and patched clothing).¹¹

To summarize: Both children and adults learn by watching others. If they watch aggressiveness then they are more likely to behave aggressively. If, on the other hand, they watch others behave in a generous and helpful manner, then they are more likely to behave in a generous and helpful way.

2. THE IMPORTANCE OF OBSERVATIONAL LEARNING FROM TELEVISION.

One of the important implications from the fact that people learn by watching others, concerns television. Ever since television first appeared on the scene, considerable research interest has been focused on this form of entertainment. The earliest and classic study, was carried out by Himmelweit, Oppenheim, and Vince (1958) at the London School of Economics, in England.¹² Their focus, along with other early studies, centered more on the effects of television per se than the effects of specific content. If, however, one of the main ways in which people learn is by observing others, then people should also learn a great deal from viewing others on television.

Television provides people with access to a very wide range of observational learning experiences. By simply sitting in front of their television sets in their own living rooms, people can observe a vast array of other people behaving in response to a variety of situations that may be either novel or familiar to the observer. In this way people can often learn about things beyond their own direct experience. This becomes a matter of rather grave concern when we realize how most of the characters on television behave. A very great deal of television portrays characters, for example, who use violence in order to solve their problems.¹³ Indeed, television often dramatizes situations in which violence is the only solution that is shown to work. Therefore it follows that television may well inadvertently teach people, and particularly children, to solve their problems by the use of violence. The research relating to this issue is voluminous and it is not my intention to review it yet again here. The reader is instead referred

to the discussions and reviews by, among others, Bandura,¹⁴ Goranson,^{15,16} Liebert, Neale, and Davidson,¹⁷ Murray,¹⁸ Stein and Friedrich,¹⁹ and the five volumes of technical reports to the Surgeon General of the United States.²⁰ The weight of this evidence is overwhelming. Television violence can have very definite short term effects and very probably long term ones too. As Richard Goranson has recently concluded regarding television violence; we "must recognize the likelihood that real people are being hurt everyday because of it." ²¹

If people learn by watching others on television then it is not just specific violence that is being taught. It is also a view of the world and the way to behave within it that is being promulgated. Using analyses of the content of the social roles and character portrayals on television, one study found that the police were portrayed as generally hardened and often brutal, private investigators as resourceful and more capable than police, salesman, as glib, journalists as callous, and truck drivers as aggressive.²² Another found that teachers were the kindest and fairest, journalists the most honest, and scientists the least kind, the most unfair, and the least honest of all the occupations portrayed.²³ Thus television has potentially awesome powers for influencing the images of the world that people develop, and the characteristic modes of behavior that they engage in.

The power that television has can be used for good or for bad. If television is capable of teaching such "anti-social" behaviors as violence, then it can also be used to teach "pro-social" attitudes and behavior. Generally, by "anti-social" behavior I mean behavior which is undesirable and in some way hurts another person or society at large. By "pro-social" I mean behavior which is socially desirable and in some way benefits another person or society at large.

Of course it is a value judgment as to what one considers to be pro-social as opposed to anti-social behavior. Because it is a value judgment does not mean it is arbitrary, however. Most people will consider gratuitous violence to be anti-social. Likewise, most people will have no trouble endorsing self-control in the face of provocation; the use of intelligence and co-operation to solve difficult problems; industriousness; honesty; the ability to delay gratification when necessary; generosity, charity, and helpfulness; and a positive and non-cynical view of the world as pro-social. However it is that we end up defining that which is pro-social or good, the argument remains that television has the power to influence, indeed help socialize, people in that direction. The potential of television for making a positive contribution to people's social learning and development, and the greater good of society, is enormous.

Most of the research on the effects of television has been concerned with the more anti-social aspects of human behavior e.g., the relation of television violence to aggressive behavior. The pro-social possibilities of television have been relatively neglected. However, there is a small, and growing, number of studies that bear on pro-social behavior. Like the early work on aggression, most of these studies have taken place in the experimental laboratory. Typically, the experimenter sets up a situation in which he can observe people's behavior. Then he provides one group of people with the experimental treatment (e.g., showing them a television film demonstrating some pro-social behavior). He provides another group of people with a control treatment

(e.g., showing them a television film that has no pro-social content). The experimenter then observes the subsequent behavior of the two groups. Any differences between the behaviors of the two groups must be due to the effects of the television program, for that is the only characteristic on which the two groups differed. By this manner, it can be known whether television programs that contain pro-social content can effect pro-social behavior. One qualification ought to be mentioned at this point. Inasmuch as the pro-social behavior that is being measured, takes place in a laboratory setting (rather than real life), strictly speaking, any conclusions must be limited to the laboratory. For example, if a television film induces an increase in helping behavior on a laboratory task, we cannot be absolutely sure that it would also effect helping behavior in situations outside of the laboratory. Hence, the results of laboratory experiments are only suggestive (sometimes strongly suggestive) of what goes on in real life, but they are not conclusive. For more conclusive evidence, we need naturalistic experiments that assess the consequences of television films in real life situations. Some of the studies are of this type and support, rather nicely, the conclusions from the laboratory studies. I shall now review this research on the pro-social effects of television and, in order for the reader to know when a particular study is a laboratory rather than a naturalistic one, I shall differentiate between the two in the review.

The research will be reviewed in five chapters. The first (Chapter 3) concerns studies showing television's effect on such altruistic behavior as generosity, helping, and co-operation. The second (Chapter 4) concerns television's effect on people's friendliness to one another. The third (Chapter 5) concerns television's effect on behavior that requires

self-control. These include the abilities to resist temptation and to delay gratification. Chapter 6 will consider television's ability to help people to overcome unjustifiable fears. Finally, Chapter 7 will consider the influence of television on social knowledge and cognitive development.

3 TELEVISION'S EFFECT ON ALTRUISTIC BEHAVIOR

In Chapter 1, several studies were discussed that demonstrated how altruism was increased through watching others. In those studies, the altruistic model was present in a real-life situation directly in front of the observer. It was even possible for the observer to talk with, or even to lean forward and touch, the person he or she was observing. To what extent, however, can generosity and other altruistic behaviors be acquired from people who are seen behaving on a television screen when there is no opportunity for personal interaction? This chapter addresses this question. First laboratory studies will be considered.

Laboratory Studies

Dr. James Bryan at Northwestern University was one of the first to investigate this question. In a series of studies,^{24,25,26} Bryan first had a child watch a 5 minute television film of someone who played on a bowling game, won gift certificates, and donated or did not donate some of these gift certificates to a charity. Following this, Bryan allowed the child to play on the same game. During this time he watched the child through a one-way mirror to see how much of his or her winnings the child donated to a similar charity. The results showed that children were definitely influenced by the models they had seen presented over television. Children who had watched a television character behaving generously subsequently donated more to charity than children who had watched a television character behaving selfishly.

Two other studies have been carried out to test television effects on

children's sharing in the experimental laboratory using similar procedures and found very similar results. These other investigators also attempted to demonstrate that the effects of television could (a) generalize to very different situations from those initially portrayed and (b) endure over time. However, these attempts were not as successful as they might have been. One such study, for example, was able to show that children who watched a television model giving away some of his candy were subsequently influenced not only in how much candy they gave away but also in how much money they shared in a similar situation. The television program did not, however, have an influence on a third measure of generosity, that of choosing to let another child play with the most attractive of two toys.²⁷ Another study found that English children too could be influenced to donate tokens to a charity by means of watching television characters do so. The television's effect had worn off however by the time the children were retested two weeks later.²⁸

While the studies above do demonstrate that children can learn generosity from others who are portrayed on television, they are also fairly open to criticism as tests of television's generalized effect on children's natural behavior. The first criticism is that the film material used in the above studies are not like those produced for commercial purposes. They last for only 5 minutes and show one model acting a number of times in just one way (e.g. generous) in one highly specific situation. The second criticism is that the child who watches is then tested in virtually exactly the same situation that he has seen the model act in. Furthermore, the test for the television program's effects are taken immediately. Under these circumstances it is possible to argue that children are only learning specific behavior in specific (and highly contrived) situations.

Thus, from studies such as the above, it might still be possible for readers to hold onto their beliefs that commercial television is not capable of modifying the generous behavior of children.

One study which attempted to control for some of these problems was carried out by Sprafkin, Liebert, and Poulos.²⁹ Responding to the criticism that previous laboratory research had used highly contrived film material, these investigators carried out an investigation with a highly successful commercial television program i.e. Lassie.

Their experiment went as follows: Thirty first-grade white middle-class children were divided into three groups and shown one of three half hour television films, complete with commercials. One group watched a prosocial Lassie program in which Lassie attempted to hide her puppy so that it would not be given away. The story's climax occurred when the puppy slipped into a mining shaft and fell onto a ledge below. Lassie, unable to rescue the pup, ran and brought her master, Jeff, to the scene. Jeff then risked his life by hanging over the edge of the shaft to save the puppy. It was this particular dramatic helping scene that had led the investigators to use this film as their example of prosocial behavior. A second group of children watched a different Lassie program in which no prosocial helping occurred. This program featured the same major characters as the prosocial film. Instead of a dramatic helping scene however, this program dramatized Jeff's attempts to avoid taking violin lessons. A third group of children watched a program called the Brady Bunch, a children's program which did not feature a dog, but instead featured the youngest Brady children's antics in attempting to set a record for time spent on a seesaw.

After watching the television program each child was taken to another room where there were a number of attractive prizes. Each child was told that he or she could win one of these on the basis of scoring points on a game. Without going into the details of how the game was played, suffice to say that the number of points the child accumulated was displayed on a timer in front of him. The experimenter also told the child that ordinarily she was in charge of a nearby dog kennel but that she had left her dogs alone today so that she could help children win prizes. To be sure that the dogs were okay she wondered if the child would mind listening through some earphones while playing on the game. If the child heard nothing on the earphones then everything was said to be fine and the child was to continue scoring as many points as he or she could. If however, there was trouble back at the kennel then the child would hear the dogs barking over the earphones. The child was told that if he or she heard the dogs barking through the earphones that help could be brought to them by pressing a Help button and that this would bring the experimenter's assistant to the aid of the dogs. The child was told however that he or she might have to press the Help button for a long time before the assistant would arrive but that the child would know when he'd arrived because eventually the dogs would stop barking. It was pointed out that the child would have to choose between, on the one hand, helping the puppies by pressing the Help button, and, on the other, playing on the game and earning points for a prize. The child was also told that there was a time limit on the game and that when it was over that there would be no further chance to win any points toward the prize. Given this conflict situation for the child between getting points toward a prize and helping dogs in distress, the question was, would the children who had seen the helping

sequences in the prosocial Lassie program help more than children who had watched the other two programs? The answer was a clear yes. The mean average of time spent pressing the helping button for children who had watched the prosocial Lassie program was 93 seconds, whereas for the neutral Lassie and the Brady Bunch programs it was 52 and 38 seconds respectively.

Thus this study very convincingly supports the previous laboratory studies and does so using a program from a highly successful commercial series. The conclusion from this first series of studies carried out in experimental laboratories (with several hundred children in all) is that television can have effects on children's sharing. The reader might conceivably, however, still argue that although television programming had been shown to have effects on children's behavior in the contrived situation of the laboratory setting, these effects had not been shown to occur in "real-life" settings. In order to answer this problem it is necessary to move right out of the laboratory situation and into natural settings. Fortunately some investigators have done this.

Naturalistic Studies

A study carried out by Stein and Friedrich, (1972)³⁰ found that television's effects on children's pro-social behavior could be durable and generalizable in a naturalistic setting. They studied 97 children aged three to five years old attending a nine week summer nursery school program at Pennsylvania State University. For the first three weeks all the children's naturally occurring free play behavior in the classroom was coded into categories such as "aggressive", "prosocial",

"persistent", and "self-control" and baselines for each behavior for each child were established. "Aggressive" included such sub-categories as physical aggression verbal aggression teasing vigorously commanding and tatling. "Prosocial" on the other hand included such subcategories as cooperating, being nurturant, and stating positive feelings and reasons to others. "Self-control" consisted of adhering to rules, tolerance of delay, and task persistence.

After three weeks of reliably measuring, a baseline for each child in each of the categories was established. The children were then randomly divided into three groups and exposed to four weeks of specially selected television. The first group watched aggressive television films such as Batman and Superman cartoons. A second group watched "neutral" films such as children working on a farm, and a third group watched prosocial television in the form of Mister Rogers' Neighborhood. (Mister Rogers' Neighborhood is an educational television film that stresses social and emotional development and includes the following themes: cooperation, sharing, sympathy, affection and friendship, understanding the feelings of others, verbalizing one's own feelings, delay of gratification, persistence and competence at a task, learning to accept rules, controlling aggression, adaptive coping with frustration). Over the four weeks a total of twelve one hour television programs were shown to each group. Hence the schedule was approximately one session every other day. Following this four week exposure to one of the three television diets, the following (and final) two weeks were used to evaluate the extended effects of TV viewing. The children's social behavior was again coded into the categories mentioned previously and any changes over the baseline established during the first four weeks

of the summer program were noted. The findings demonstrated that the programs the children watched effected their subsequent social behavior. Thus those children who watched the aggressive films became more aggressive (at least those who were already above average in aggressiveness to start with did) while those who watched the pro-social television showed higher levels of self-controlling and achievement behavior (task persistence) than those in the other two groups. For children from lower-social-status families, exposure to Mister Rogers' Neighborhood was also associated with increased prosocial interpersonal behavior (cooperation, nurturance, and verbalization of feeling) in comparison with the other treatment groups. Higher-social-status children did not show positive effects on interpersonal behavior, however (This socio-economic status difference may have reflected baseline differences originally and, therefore, how much increase was possible). Thus this extensive study carried out over a 9 week period dovetails nicely with the results of the laboratory studies cited earlier. Real classroom behavior was modified as a result of watching an average of one half hour a day of television.

In order to study further the prosocial effects of the educational television program Mister Rogers' Neighborhood, Friedrich and Stein (1975)³¹ carried out a second study. Seventy-three kindergarten children were randomly assigned to one of five television watching conditions. One group of children watched four "neutral" programs including children's films about nature, a visit to the post office, and other topics unrelated to interpersonal relationships or feelings. The other four groups of children watched four programs from Mister Rogers' Neighborhood which were chosen to form a dramatic sequence. In this sequence, a jealous

crisis arose in which one of the characters feared that she would be replaced by a fancy new visitor. Much of the action centered on the attempts of friends to understand her feelings, reassure her of her uniqueness, and help her. These programs were edited by 5-12 minutes so that the total time for each was about 20 minutes. Children watched the television programs in groups of three or four over four days. Three sets of tests were given to the children shortly after they had viewed each of the films. The question of course was: "Would the children who had watched the prosocial television film be influenced in their responses to these tests in a manner different from those children who had watched 'neutral' films?" The answer once again was a "yes".

On the first test, a test of knowledge of content, it was found, perhaps not surprisingly, that children who had watched prosocial television learned this content better than children who had watched neutral films. Of more importance though they also generalized the ideas in the programs to new situations more closely related to everyday life. Thus it was shown that, at the very least, children were able to retain what they had learned from the programs. On a second test, a puppet playing test in which the experimenter manipulated one puppet and the child a second, situations were enacted either parallel to the television program Mister Rogers' Neighborhood or somewhat different from it. The child's spontaneous verbal and nonverbal prosocial behavior was observed within this puppet-playing context. In addition, sometimes the experimenter would ask the child specific questions e.g., "How do friends show they like you?" Once again, children who had watched the prosocial television films showed more prosocial behavior than children who had watched neutral films. This was true both in situations that were

similar to those in the Mister Rogers' Neighborhood program and also to those that involved new situations. On the third test, a behavioral measure of helping another child in a quite different context, there were no overall differences between those children who had watched prosocial television programs and those who had watched the neutral television programs. However, if watching the prosocial television was paired with direct training to be helpful through "role-playing" techniques, then children in this condition were more helpful. This suggests/that prosocial television might be used as an adjunct to other training procedures when attempting to teach or enhance prosocial tendencies in children - as nursery school teachers and parents might well wish to do.

Summary

Several different studies were discussed in this chapter. All of them found that television affected children's altruism and generosity. Some of the studies used 5 minute television films of highly salient models engaging in very specific behavior and then assessed their effects on children who were placed in highly similar circumstances to the television model. Still others provided children with up to twelve one-hour television programs over a period of four weeks and measured the effects on children's free-play behavior with other children. Regardless of the methodologies used, the effects were the same. Children who were exposed to television films having altruistic content subsequently demonstrated more altruism in their own behavior, compared to other children who did not see films having altruistic content. Thus we can conclude that altruistic content on television can lead to increments in the altruistic behavior of those who watch it. This conclusion

however is limited to children. No studies have been carried out using adults as subjects to see if altruistic television programming can affect their behavior.

4 TELEVISION'S EFFECT ON FRIENDLINESS

Most people would consider friendliness to be socially desirable behavior. Friendliness in others does make life substantially more worthwhile. Friendliness is more than just socially desirable however. It is also socially necessary. The absence of friendliness in others can lead to hostility, depression, and breakdown in individuals who are cut off from it. It can lead to the break up of social organizations and institutions in which it is lacking. Ultimately society is impossible without it. Clearly it is worthwhile to discover what factors there are that can increase such behavior. One possible such factor is television.

Laboratory studies

In a laboratory study, Fryrear and Thelen³² showed nursery school children videotaped films of adults expressing affection, and playing in a friendly manner toward a small stuffed clown. Children were then given an opportunity to play with a group of toys which included the small clown. An observer sat in the back of the room and watched to see whether the child imitated the affectionate behavior. Children who watched television films of models behaving affectionately were more likely to express similar affection while playing than children who had not seen such behavioral examples on television. One important, and interesting, qualification to Fryrear and Thelen's findings were that boys were only likely to become more affectionate if they had seen an adult male behave affectionately on television. If the same behavior had been demonstrated by an adult female then the boys were not so influenced. Thus television is similar to real life in its effects. People

select who they learn from and perceived similarity can be important. However the fact that television programming can effect children's demonstrations of affection was shown in this laboratory experiment.

Naturalistic studies

A dramatic and potentially important study was carried out to see if television programs could be used to enhance social interaction among those nursery school children who tended to isolate themselves from their peers.³³ Thirteen fairly severely solitary children were chosen for the study. In order to qualify, the children first had to be rated as socially withdrawn by their head teachers. Of 365 children enrolled in nine nursery school classes, 45 were nominated by teachers in this preliminary selection. Each of these children was then systematically and reliably observed on 32 occasions over a period of eight days to see if they engaged in social interaction with a peer. Thirteen children who were interacting on fewer than five of the 32 possible interactions were included in the study. Thus, to qualify for the experiment, children had to meet the dual criteria of having exhibited extreme withdrawal over a long period of time as judged by their teachers, and to have displayed isolate behavior as measured by objective behavioral observations. One group of these isolated children was then shown a specially prepared sound-color film shown over a television console. This film, which lasted for just over 20 minutes, portrayed a sequence of 11 scenes in which children interacted in a nursery school setting. In each of the episodes, a child was shown first observing the interaction of others and then joining in the social activities, with reinforcing consequences ensuing. For example,

the other children offered him play material, talked to him, smiled, and generally responded in a positive manner to his advances into the activity. The scenes increased over time in terms of the vigor of the social activity and the size of the group. The initial scenes involved very calm activities such as sharing a book or toy while two children were seated at a table. In the ending scenes, as many as six children were shown gleefully tossing play equipment around the room. Furthermore, all the modeling scenes were accompanied by a female narrator, judged by the experimenter to have a very soothing voice, describing the actions of the model and the responses of the other children. For comparison purposes, a second group of the isolated children were shown a film of dolphins engaging in acrobatic feats. This film was accompanied by a musical soundtrack.

Following exposure to one of the two films children were returned to their regular classrooms. Once again they were systematically and reliably observed on 32 occasions over a period of eight days to see if they were engaging in social interaction with a peer. The people doing these observations were kept unaware of the particular programs the children had watched, thus eliminating the possibility of this source of observer bias. The results were quite dramatic. Children who had watched the specially made film about others engaging in social interaction increased from their baseline score of an average 1.75 interactions out of the 32 possible to an average of nearly 12 interactions out of the possible 32. The control group who watched the program about dolphins showed no increase over their baseline scores at all. The strength of this finding is even greater when it is realized that a random group of 26 non-isolated children who did not see television

the programs, averaged 9 interactions out of /possible 32. Hence, children who at one point appeared severely socially withdrawn were now actually interacting more often than "normal" children. The strength of the finding is enhanced even further when a follow-up study at the end of the school year showed that teachers, who had been kept uninformed of which program the children had seen, rated the children's behavior in a manner that paralleled the "objective" behavioral measures. Only one of the six children who had been in the "modeling interaction" condition was still rated as an isolate whereas four of the seven "control" children were again judged to be extreme isolates. This study showed quite clearly that by devising carefully constructed film material to show over television monitors, significant social behavior can be altered among nursery school children and, furthermore, that such behavior change can be quite long lasting.

Fechter (1971)³⁴ carried out a study with mentally retarded adults. One group watched a 5 min. film of a 12 year old child beating up a large inflatable Donald Duck doll. Another group watched a 5 min. film of a 12 year old child playing in a friendly manner with the same doll. The behavior of the retardates was then observed for 5 minutes in the experimental room and for 30 minutes on the ward and coded either as friendly (e.g. talking) or aggressive (e.g. fighting) by observers who were not aware of which films the patients had seen. In the ward, the number of aggressive responses increased slightly (from baseline measures) after the aggressive film, and decreased following the friendly film. These results therefore suggested that a television presentation, while not necessarily leading to direct imitation can nonetheless communicate the "mood" in viewers, with this "mood" being expressed behavior which

is rated by others.

In an experiment designed to assess the effects of both Sesame Street and Mister Rogers' Neighborhood on childrens' social behavior in the preschool, Coates, Pusser, and Goodman (1976)³⁵ carried out the following study. First of all, 32 children aged between 3 and 5 years were observed over several days and the frequency of their different behaviors were recorded into one of the following three main categories which the authors described as follows:

(1) Positive reinforcement: giving positive attention such as praise and approval, sympathy, reassurance, and smiling and laughing; giving affectionate physical contact such as hugging, kissing, and holding hands; giving tangible reinforcement such as tokens, prizes and other objects.

(2) Punishment: giving verbal criticism and rejection such as criticism, negative greetings, obvious ignorings, and sarcasm; giving negative physical contact such as hitting, biting, and kicking; withdrawing or refusing tangible reinforcement such as taking away a toy.

(3) Social contact: any physical or verbal contact between a child and another child or adult.

Following these baseline measures children watched either 15 minutes of Sesame Street or 15 minutes of Mister Rogers' Neighborhood for each of four days. These programs had originally been shown on the U.S. Public Broadcasting System in March 1973 and had been scored on the basis of a content analysis³⁶ for the frequency of occurrence of positive reinforcement and punishment that took place within the program. After watching these programs, in a group, each child was observed for a 3

minute period and the frequency with which he emitted one of the behaviors mentioned above was recorded. In addition, for four days following, while no television programs were shown, each child was again observed for 3 minutes per day for the frequency of giving of positive reinforcement and punishment to other children and to adults in the nursery school. As before, these observations were conducted during the pre-school free-play period.

The results showed that exposure to the 15 minute television programs did effect the children's social behavior in a significant manner, and particularly on the immediate post-viewing tests. For all children Mister Rogers' Neighborhood significantly increased the giving of positive reinforcement to, and social contacts with, both other children and with adults. These findings were in direct accord with those of Stein and Friedrich (1972)³⁷ also concerned with the Mister Rogers' Neighborhood television program. For Sesame Street the effects were only found for children who had low baseline scores. For these children, watching Sesame Street significantly increased the giving of both positive reinforcement and punishment to, and social contacts with, other children and adults in the preschool. For children whose baseline scores were high, Sesame Street had no significant effect on behavior. Furthermore, the authors felt that the pattern of results were generally consistent with the content analysis of the 2 programs they had carried out earlier.

Summary

The results of one laboratory and several naturalistic experiments have definitely demonstrated that the type of interpersonal interaction engaged

in can be affected by the content of the television programs that are seen. Friendly behavior increases among people who have seen friendly behavior portrayed on television. This conclusion at the moment, unfortunately, rests on a generalization from studies concerned, with one exception, only with nursery school children. The exception involved mentally retarded adults.

5. TELEVISION'S EFFECT ON BEHAVIOR INVOLVING SELF-CONTROL

Learning to acquire control over our own behavior is a long process that starts from the first few months of life. It is a requirement for civilized living. Indeed a society made up of people who were incapable of exerting a control over their own behavior can hardly be conceived of. Although different individuals and cultures may disagree over what is the optimal amount of self-control that is considered desirable, there is no question that some degree of this behavior is absolutely necessary. We have briefly discussed in Chapter One how a real life model can influence this behavior in children. This chapter will consider some of the studies carried out on the effects of television on this behavior.

Laboratory studies

Several studies have examined self-control processes in children in response to television programming. Stein and Bryan (1972)³⁸, in a laboratory experiment, explained to children the rules by which they could win money by playing on an electronic bowling game. Before playing the game the children watched a television program in which they saw another child playing the same game and who either kept to the rules and at the same time preached that the rules ought to be kept, or broke the rules and preached that they ought to be broken. Children who watched the television program that modeled and preached keeping to the rules only cheated to the extent of rewarding themselves

incorrectly an additional 12.5¢. However, children who had watched a TV model violate the rules and preach the rightness of such violations, rewarded themselves incorrectly an additional 28.2¢. Thus, within the laboratory at least it was shown that keeping or breaking rules and, in effect, stealing, could be effected by brief television programs.

Other studies, too, have been carried out to see whether television programming could influence children's self-control in a "resistance to temptation" situation. In an experiment carried out by Wolf and Cheyne (1972),³⁹ 7 to 8 year old boys were taken to a games room and allowed to play with some toys. The children were told however that they were not to touch or play with one particularly attractive toy. Children were watched for a 10 minute period through a one-way mirror and it was recorded (a) how long it took before those children touched the forbidden toy and (b) for how many minutes of the 10 minutes they were in the room that they actually played with the toy. The investigators reported that an average of 4 minutes and 40 seconds would go by before an average child in this situation would touch the toy. However, if the child had watched a TV program of another child playing with similar toys and this TV child had not touched the toy, then the average child would wait nearly 8 minutes before touching the toy. If, on the other hand, children had watched a TV program of another child violating the rule and touching the forbidden toy, then he would himself be likely to touch the toy within less than 3 minutes. Very similar results were found when the measure of the child's resistance to temptation was based on the length of time he played with the toy. The average child would play with the forbidden toy for about 1 minute out of the 10 that he was observed. If he watched a TV program of

another child violating the rules then he would play with the forbidden toy for nearly 4 out of 10 minutes. If however, he watched a TV program of another child adhering to the rules and not touching the forbidden toy then he would only touch the forbidden toy for about $2\frac{1}{2}$ seconds.

In order to see if the socializing influence of the televised programs was durable over time, the youngsters were brought back one month later, put into the same situation, and again observed to see how long it would be before they gave in to the temptation of playing with the forbidden toy. Once again the results tended to show an effect for the television program. Whereas children who had seen no television film one month earlier managed to resist the temptation for nearly 6 minutes, children who had seen a model giving in to the temptation, only resisted for 4 minutes. In this four week retest no effect was found for the "self-controlled" model i.e., although the deviant model had an effect on increasing deviancy the self-controlled model did not manage to increase self-control in observers.

In a subsequent study, Wolf (1973)⁴⁰ showed again that televised models who obey rules have an influence on helping children to obey, whereas televised models who deviate from rules tend to influence children to deviate. Once again television had more effect as a bad example than as a good one. Children who watched someone break the rules, subsequently broke the rules themselves more than children who watched someone else keeping the rules, subsequently kept them.

Still another form of self-control is the ability to delay gratification to a later point in time. In a study carried out with seventy-two

9-year-old New Zealand children, Yates (1974)⁴¹ demonstrated how television programs could substantially alter children's ability to delay gratification over a four week period. First a baseline measure was obtained of the children's ability to delay gratification. Essentially children were asked if they would prefer a smaller reward such as money or candy immediately, or a larger one by waiting for seven days. Some time later, some of the children watched television programs of an adult female model exemplify high-delay behavior and/or verbalize reasons for delaying gratification. Other children did not watch such programs. Compared to these "controls", children who had watched the television programs showing delay of gratification were subsequently more likely themselves to choose to delay their gratification for a larger reward later. The greatest magnitude of change occurred when modeling and and persuasive cues were combined. Furthermore, when the children were re-tested four weeks later their behavior still showed the effects of the exposure to the television film. Children who had watched the television portray someone preferring a larger reward later to a smaller one immediately, were themselves more likely to "defer gratification" and take the larger reward later.

Naturalistic studies

In a study described in some detail in Chapter Three, Stein and Friedrich (1972)⁴² showed the television program Mister Rogers' Neighborhood to 93 nursery school children for four weeks and observed their free-play behavior. In addition to increasing generally altruistically behaviors, these programs also increased self-control in the form of obedience to rules, tolerance of delay, and persistence to tasks. By way of comparison, it might be noted, that the aggressive films in their study led to

a decrease in self-control on these same measures. Additional analyses showed that when the children were frustrated, those who had watched a diet of prosocial television programs were less likely to show aggression and more likely instead to manifest increased prosocial behavior in response to the increased frustration. Again, the opposite set of behaviors were found for the children who had watched aggressive television programs. Such children showed a decrease in prosocial behavior with increased frustration, and a general increase in aggressiveness. Thus, the evidence seems to be that relatively little (1 hour every other day for 4 weeks) prosocial television can influence the amount of self-control that children engage in in natural play settings.

Summary

Several studies have demonstrated that self-control, both in laboratory and natural settings, can be effected by what children watch on television. Cheating on games, touching forbidden toys, preferring a larger but delayed reward, and responding to frustrative situations, could all be effected by the content of television programming. Of considerable interest is the fact that these behaviors could be influenced in either direction, and indeed possibly more easily influenced in the anti-social direction. Thus, if television shows people cheating, disobeying rules, preferring the immediate payoff rather than even better ones later, and responding to frustration with little display of self-control, then this is what it will produce in viewers. If, on the other hand, it portrays models who prefer to exhibit self-control in the presence of temptation and frustration, then these are the behaviors it will shape.

6. TELEVISION'S EFFECT ON DIMINISHING INAPPROPRIATE FEARS

Most people at some time or another during their lives develop what might be called an inappropriate fear to some situation or thing. Often such fears are somehow or other dealt with and gotten over during the course of living. Still others, while perhaps never overcome, are of such minor consequence that they don't interfere very much with ongoing life activity. Still other inappropriate fears are more disruptive however and these are often treated in therapy where they are referred to as phobias. Most phobias are now able to be "cured" using a number of techniques known collectively as behavior therapy. By treating phobias as essentially no different in kind from any other fear, i.e., a learned response to a particular situation, therapists are able to help people overcome their fears through providing them with new learning experiences in the presence of those situations or things which elicit the fear. Since it has now been widely established that people can learn by watching others, some research scientists have started to explore the possibility of using television to help people deal with and overcome their fears. Some of these exploratory investigations will be discussed here. They have all used controlled laboratory situations to investigate this problem in. However, as will be seen, the behavior measured is far from inconsequential to the individuals concerned.

The first study to be reported concerns young children who were inappropriately afraid of dogs (a not uncommon fear in young children). Bandura and Menlove (1968)⁴³ first measured children's willingness to approach and play with a cocker spaniel on a number of occasions. In this way they discovered which children were afraid of dogs. Some of these children

were then shown eight specially prepared 3 minute film programs over an eight day period in which they saw other children playing with dogs. Another group of fearful children were shown movies of Disneyland instead. After watching these films the children were again given opportunities to approach live dogs. Children who were previously fearful but had watched a film program of other children showing courage were now much more likely to approach and play with the dogs than the children in the control group were. Furthermore, this reduction in fear generalized to dogs quite different from those seen in the film and, furthermore, was maintained over a four-week retest period.

Another study⁴⁴ was carried out to see whether film programming could help adolescents and adults reduce their fear of snakes. Only those who reported having a severe fear of snakes were used. For example, their dread of snakes had actually to be so severe as to interfere with their ability to do gardening or go camping, for them to be used in the study. Stringent behavioral and attitudinal measures were taken to assess the actual degree of fear aroused by snakes. The investigators then attempted to get their clients over their fear of snakes in a number of ways. One of these ways included the use of specially constructed film which showed young children, adolescents, and adults engaging in progressively threatening interactions with a large king snake. The film was in colour and lasted for nearly 35 minutes. Following watching the film the attitudinal and behavioral measures were taken again in the presence of live snakes. The findings were clear. People who had watched the special film significantly reduced their fears on the behavioral tests than those who had not watched the film. It might be mentioned that the behavioral measures were quite

stringent and included actually holding the snake in the hands. The ultimate test (which few indeed passed) included allowing the snake to lie in their laps while they held their hands passively at their sides.

Weissbrod and Bryan (1973)⁴⁵ attempted to see whether similar techniques would succeed with eight to nine-year-old children. Only children who indicated an extreme fear of snakes on a fear inventory and who also refused to pet a snake during a pretest were included in the study. These children then watched a 2½ min. videotaped sequence involving a model either approaching a live 4-ft. boa constrictor (the experimental group) or a stuffed 5-ft. toy snake (the comparison condition). All children watched their respective films twice through and then, two days later, watched them twice through again. Following this second showing of the film the children were taken to an aquarium which housed a 4-ft. boa constrictor and asked to touch, then pet, and then hold the snake. The experimental group were able to go further into the sequence than were the control comparison group, and furthermore maintained their superiority on another test taken two weeks later. For example, while none of the ten children in the control condition were able to actually handle the snake two weeks after watching a "neutral" film, 11 out of the 40 children in the experimental condition were able to handle the snake.

Summary

Three separate studies have dramatically illustrated the power of television to modify people's inappropriate fears. The potential for television programs to be used effectively in the therapeutic context have thus been demonstrated. Some of the implications and possibilities for

using film presented therapy have been discussed elsewhere (e.g., Bandura, 1971).⁴⁶ The studies reviewed in this section used specially constructed film material. Furthermore, the films were shown in what might be called a therapeutic context. These factors mean of course that we need further evidence before we can generalize directly to commercially produced programs watched by viewers sitting in their living rooms. Nonetheless, it seems right to include this material in this report. If such powerful emotional reactions as fear of snakes can be modified by (albeit specifically constructed) 35 minute films, it does support the possibility of television for reducing many lesser inappropriate fears through normal programming.

7. TELEVISION'S EFFECT IN CREATING KNOWLEDGE

When discussing the role of television in disseminating information, it is possible to distinguish between didactic and non-didactic programming. Didactic programming is that which has been especially prepared to foster certain knowledge or skills. It is educational in intent. Non-didactic programming was never intended to educate. Commercial entertainment ^{might} dramas are of this nature. Nonetheless, these programs/also have the effect of altering people's beliefs about the world. I shall first discuss didactic programming.

Didactic Programs

In 1969 an organization called the Children's Television Workshop, after two years of planning funded by both public and private agencies put Sesame Street on the air. The intent of this program was to educate. It was aimed at children from 3 to 5, and particularly those children who did not have access to nursery schools. It used commercially proven tactics to hold attention such as animation, fast movement and slapstick humour. Its educational intent was to foster such skills as the ability to recognize letters, to count, to know the meaning of words, and so on.

Ball and Bogatz (1970)⁴⁷ carried out an independent assessment of Sesame Street under the auspices of The Educational Testing Service. They sampled a total of 943 children of both sexes (731 of whom were considered "disadvantaged") from five widely separated areas of the United States who had watched the program over a six month period. The research strategy had initially called for the sample to be divided into two groups: one

group which had watched Sesame Street regularly and a second group which had not. In that way it would have been possible to make direct comparisons. Unfortunately, the authors found that, due perhaps to the popularity of the program, too many of the children in the "not-encouraged to watch group" had in fact watched the program, thus making comparisons between the two groups unlikely to show an effective difference. They were able to get over this problem however by dividing the whole group into quartiles (a quartile contains exactly 25% of the cases in the sample) on the basis of how much viewing of Sesame Street had taken place. Quartile 1 rarely watched Sesame Street. Quartile 2 watched two or three times a week. Quartile 3 watched about four or five times a week, and Quartile 4 watched more than five times a week.

All the children had been pretested on a series of specially prepared tests of knowledge 6 months previously - before any of them had had an opportunity to watch Sesame Street. Now after 6 months of watching in different amounts, the children were tested again on the same or similar tests and any gains they had made were assessed. Overall, and on a number of their sub-tests, Ball and Bogatz (1970) found that (1) those children who watched the most learned the most, (2) the skills that were best learned were the ones that received the most time and attention on the program itself (3) that the programs did not require formal adult supervision in order to produce their educating effects and (4) that these effects held regardless of age, sex, geographic location, socio-economic status, IQ, and whether the children watched at home or at school, and (5) that 3-year olds gained more than 5-year olds.

Unfortunately, there was a major confounding in this first study.

Children who had watched the most had both higher pretest scores on the different measures than children who had watched little, and also had significantly higher IQ scores. Indeed there was a perfect rank ordering of mean IQ with quartile of watching. Essentially the more intelligent children watched Sesame Street more than less intelligent children. This meant that any gains attributed to watching Sesame Street might simply have been due to higher IQ children acquiring more general knowledge over the same 6 month period from sources other than Sesame Street. In order to attempt to tease out the correct relationship, Ball and Bogatz (1970) carried out a number of additional analyses in order to demonstrate the effects of Sesame Street. They pointed out for example that 3-year olds who watched most ended up with higher posttest scores than 4- and 5-year olds who watched little. Further that "disadvantaged" children who watched a lot scored higher than middle-class children who watched only a little, and that children who had Spanish as their first language made the most overall gains. Hence, overall, the results did seem to suggest that watching Sesame Street effectively increased the children's knowledge.

More definitive results had to wait for the second year report. In this study, Bogatz and Ball (1971)⁴⁸ studied a real experimental group against a comparable control group. The authors went into areas in North Carolina and Los Angeles where Sesame Street could only be watched on certain channels that not everybody could get (e.g., cable TV). The authors then arranged for one group to receive the channel containing Sesame Street while the matched controls continued not to receive it. The experimental group were encouraged to watch the program. Although on pre-tests the children in both groups were equivalent, on the post-test clear and significant gains had been made on a number of the tests for the group that

had watched Sesame Street compared to those who did not watch the program. These gains were found on tests that included knowledge of the function of parts of the body, the naming of geometric forms, the role of community members such as firemen and mailmen, recognizing numbers, the naming of letters, and sight reading. The effects however were not very large. Typically, after six months of watching, the experimental group knew only two or three letters of the alphabet or functions of the body more than did the control group. However the possibilities of using television for didactic purposes with nursery school children is just in its infancy. Certainly Sesame Street has been shown to hold the attention of its viewers. Furthermore instructional television has certainly been shown to be at least as effective as more traditional instruction with slightly older children in proper school settings.⁴⁹ Sesame Street had education as a specific goal. To what extent though, do people learn about how the world operates and the different people found therein from commercial television programs?

Non-Didactic Programs

Occupational roles

One of the interesting findings from the Sesame Street studies was that it taught children about occupational roles.⁴⁸ To what extent though does commercial television influence our perceptions of other occupations and people? To what extent is our conception of a policeman (or a policeman's conception of what it's like to be a policeman) influenced by the police that are portrayed on television? Unfortunately, hard experimental data on this particular question are few and far between. Researchers have,

however, done content analyses of the social roles and character portrayals on television. As mentioned in Chapter Two, Defleur (1964)⁵⁰ found that television portrayed the police as generally hardened and often brutal; private investigators as resourceful and more capable than police; salesmen as glib, journalists as callous; and truck drivers as aggressive. Smythe (1964)⁵¹ found that teachers were the kindest and fairest, journalists the most honest; and scientists the least kind, the most unfair, and the least honest of all the occupations he studied.

Ethnic groups

On American television the characters portrayed are overwhelmingly young, white, middle class, and American. Most ethnic minorities and citizens of foreign countries are ignored. When they are presented they are often made to look either ridiculous or villainous. Pierre Berton has recently discussed how Hollywood has traditionally portrayed Canada and Canadians and this is a good case in point.⁵² In response to black American protest, portrayals of Black Americans seem to have shifted somewhat in recent years such that they are now presented in higher status positions. In a recent content analysis of television, Donagher, Poulos, Liebert, and Davidson (1975)⁵³ found that black males, for example, were usually portrayed as non-aggressive, persistent, altruistic, and more likely to make reparation for injury than any other group. Black women had a high ability to explain feelings in order to increase understanding, resolve strife, and reassure others. Unfortunately no studies have actually been carried out to see whether these particular portrayals are actually mirrored in viewers' perceptions. On the other hand one early study did find that television could influence children's

attitudes about foreigners.⁵⁴ In addition, a very recent Canadian study has shown that children's verbal play preferences could be made more favourable to minority groups after viewing specially prepared inserts on Sesame Street.⁵⁵

Sex roles

Females are totally under-represented on television. When they are represented it is in a very narrow range of possibilities. The typical television female is perhaps best represented by the television commercial which represents her as ecstatic with the excitement of presenting a new type of food product (or shiny kitchen floor) to her husband, children, or neighbor. The alternative is to present her as a young, glamorous seductress. A study carried out by Sternglanz and Serbin (1974)⁵⁶ for example, content analyzed a number of children's programs that had high Nielsen ratings. They found, first of all, that males were portrayed nearly twice as often as females. There were also major differences between the sexes in the types of behavior portrayed. Males, for instance were more often portrayed as aggressive and constructive (e.g. building, planning) than females, while females were more likely to be shown as deferent and passive. In addition, the consequences that males and females received for emitting behavior were different, with males more often being rewarded and females more often receiving no consequence. An exception to this was that females were more often punished for high levels of activity than were males. Thus it appeared that commercially-produced television programs were carrying quite different messages about the appropriate behavior for males and females. Given the general evidence on the effectiveness of modeling on television as a means of teaching behavior, television may well be an important source in the learning of stereo typed sex roles.

Summary

The research relating to television's effect on viewer's knowledge of the world has not been quite as extensive as the research on the direct effects on social behavior. Nonetheless it is highly suggestive and a source of concern.

If viewers alter their perceptions of various roles accorded to the sexes, the races, or the occupations as a result of the television programs they watch, then television has a powerful potential for presenting these roles in positive or negative lights. The potential for teaching and educating in a positive manner in this way may be immense.

8. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Over 20 different experimental studies have been reviewed from both laboratory and naturalistic settings. These have demonstrated that television and film programs can modify viewers' social behavior in a pro-social direction. Generosity, helping, cooperation, friendliness, adhering to rules, delaying gratification, courage, and cognitive knowledge, can all be increased by television and film material. This general statement accords with the partial reviews of this same literature that have been carried out previously (Bryan & Schwartz, 1971; ⁵⁷Liebert, Neale, & Davidson, 1973;⁵⁸ Stein & Friedrich, 1975).⁵⁹ Overwhelmingly, these studies were concerned with children's behavior. There were two exceptions: Fechter (1971)⁶⁰ showed that the ward behavior of institutionalized mentally retarded adults could be influenced to be friendlier and less aggressive after watching affectionate behavior being expressed on film, and Bandura, Blanchard, and Ritter (1969)⁶¹ showed that films could be used to help adults overcome their fear of snakes.

On the basis of the studies reviewed in this report it must be formally concluded that, for children at least, television does have the power to effect the social behavior of viewers in a positive, pro-social, direction. This conclusion, therefore, provides a mirror image to that even larger body of research demonstrating a relationship between television and anti-social behavior.

It would appear that television has the power to influence social behavior of viewers in whatever direction the content of the

programs dictate. If, on the one hand, pro-social helping and kindness make up the content of television programming, then this is what is learned by viewers as appropriate, normative, behavior. If on the other hand, however, it is anti-social behaviors and uncontrolled aggression that are shown, then this is what viewers learn to be the norm. This view will fit with the fact that, in 1970 alone, over three billion dollars was spent advertising products on U.S. television.⁶² Advertisers believe, correctly, that brief, 30 second exposures of their product, repeated over and over, will significantly modify the viewing public's behavior in regard to those products. In this regard it is interesting to note that while television companies encourage advertisers to believe that this is the case they are not so eager to agree that their drama sequences can have equally powerful effects. It is not reasonable that television companies can have it both ways. The message therefore is quite clear. Children learn from watching television and what they learn will depend on what they watch. Most of the studies reviewed used programs that ran for only a few minutes. They demonstrated statistically significant effects. One can only guess at what the effects of two or three hours a day, seven days a week, 52 weeks a year for 18 or more years, would be!

Recommendations

The recommendations that follow from the evidence reviewed above are also clear:

1. First we must alter our conceptualization of what the nature of Television is television is/much more than entertainment. It is also an educator, a source of observational learning experiences, a setter of norms. It determines what children will judge to be appropriate behavior in a variety of situations. When we consider that the average child spends almost as much time watching television as he or she does in school, or playing with his or her friends, or talking with his or her parents, we can get some idea of the magnitude of the situation. Television must now be viewed as one of the major agencies for the socialization of children that our society possesses. There has been a reluctance to see television in this light, and probably for the good reason that television was never intended to be an agent of socialization. But, however unintentionally it occurred, television is an agency for socialization. It does shape and effect the behavior of those who watch it. Once this is grasped, issues of power and control become apparent.

2. A greater degree of public control must be exerted over the content of television drama than currently occurs. While there is some evidence that adults' making evaluative comments about the behavior being portrayed on a television screen does effect the impact it has on young viewers,⁶³ this is not really an adequate form of control. Adults cannot possibly continually monitor their children's TV watching behavior. Control is going to have to be exerted over the content of television before it comes on the air. The content of television

programs today are not, of course, uncontrolled. In the main they are controlled by "the ratings" i.e. measures of how many people tuned in to that particular program. If "violence sells", the networks can hardly be blamed for increasing violent content. However the larger purposes of society must be considered. The question is, "Can we afford to leave the content of television programs to be controlled by the ratings?" One view that has been put forward^{58, 59} is to extend the control over the television system to that which is currently exerted over the educational system. The educational system is controlled in part by both elected local boards, and by elected municipal and provincial government agencies. Ultimately it is the government that is responsible for the curricula of the schools. This line of reasoning leads in the end to their being as much government control over television as there is over education. While such a method of exerting control might be considered rather extreme in the present context, there is no doubt that some additional control is needed. Essentially we should be increasing the amount of pro-social content, and decreasing the amount of anti-social content. Some other ways in which action by the government could bring this about have been discussed elsewhere.⁶⁴

3. Additional research should be funded:

(a) First research should be carried out to study the effects of pro-social content on adults. As already noted, the overwhelming majority of studies have been concerned with the social behavior of children. What kinds of pro-social television will significantly alter adult's behavior however. Indeed will adult's social behavior be as readily influenced as young children's is? This would seem to be a very important question indeed. It is also noteworthy that in the violence

research: too, very few studies have been concerned with adults. Most have been carried out with children and adolescents.

(b) A second very important line of research concerns the durability and generalizability of learning from television. To what extent will the learning that occurs from watching television endure over time and generalize to new situations? Although there is some data on this, much more is required.

(c) A third very important line of research derives from our discussion of Chapter 7 concerning the effects of television's portrayal of social roles. While the content analyses that have been carried out suggest what kinds of roles are being portrayed for the different sexes, ethnic groups, and occupational roles, it has yet to be empirically established that changes in the roles portrayed on television actually does lead to changed perceptions of those same roles in real life, on the part of the viewers. Studies to investigate this could readily be carried out if funding was made available.

(d) A fourth line of research would be to develop more sophisticated coding frames so that the ongoing material content of television programs can be analyzed as to its pro-social (and other) matter. One purpose of this would be so that concerned agencies and people could monitor changes that occur over time in television content (e.g. is pro-social content increasing over anti-social?). Beginnings have already been made in this area^{65,66} but additional research here, as elsewhere, would also be very worthwhile.

9. FOOTNOTES

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